Appendix A Institutional Controls Monitoring Report Questionnaire

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Institutional Controls Monitoring Report Questionnaire

DATE OF

INSPECTION: 17-18

July 2001

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TITLE: Project Task Lead

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TITLE: Project support TELEPHONE: 526-0734

GENERAL OU DESCRIPTION AND OPERATIONAL HISTORY: Provide a brief description of the operable unit and its operational history since the last monitoring inspection (or ROD signature if the first inspection). Summarize the ROD's institutional controls and land use assumptions. Take photographs of each site, identify the date, time, location, and compass orientation of each photograph in a photographic log. Also, provide a brief description of how INEEL is meeting the facility-wide institutional control requirements (use additional sheets as necessary).

The Idaho National Engineering and Environmental Laboratory (INEEL) is a government-owned/contractor operated facility managed by the DOE-ID (Figure 2-1) that is located 51 km (32 mi) west of Idaho Falls, Idaho. The INEEL encompasses portions of five Idaho counties: (1) Butte, (2) Jefferson, (3) Bonneville, (4) Clark, and (5) Bingham, occupying 2,305 km² (890 mi²) of the northeastern portion of the Eastern Snake River Plain. The Test Reactor Area (TRA) was established in the early 1950s in the southwestern portion of the INEEL. The TRA has housed extensive facilities for studying the effects of radiation on materials, fuels, and equipment, including high neutron flux nuclear test reactors. Radioactive, unregulated, and Resource Conservation and Recovery Act (RCRA) hazardous wastes have been generated from scientific and engineering research projects conducted at TRA. Although extracted and treated, the disposed wastes still contained low-level radioactive and RCRA-hazardous solutions. As originally designed and installed in the early 1950s, two separate liquid waste streams were generated and discharged at TRA: (1) sanitary sewage and (2) all other liquid waste streams. Since the end of the cold war, many of the TRA facilities have been put on standby and scheduled either for eventual remediation or decommissioning and demolition (D&D).

GENERAL QUESTIONS

1. Has INEEL developed a comprehensive facility-wide approach for establishing, implementing, enforcing, and monitoring institutional controls at the facility. This approach will frequently include a Base Master Plan or a facility-wide land use plan, installation maps, a comprehensive permitting system, and other installation policies and orders.

The INEEL Comprehensive Facilities and Land Use Plan (CFLUP) is used to track land use and includes installation maps. Internal procedures control work and land use.

2. Does the CFLUP (or equivalent) list all areas or locations covered by the OU 2-13 ROD that have institutional controls for protection of human health or the environment?

The CFLUP lists all the areas in the OU 2-13 ROD that have institutional controls for protection of human health or the environment.

3. Do the applicable company work control procedures describe how and what entities and persons are covered by the Institutional Controls? If yes, list who is covered (e.g., contractors, employees, invitees) and describe the nature of the coverage.

Yes. Work control procedures cover all entities and persons including, but not limited to, employees, contractors, lessees, and visitors that access controlled release sites.

4. Do procedures that control activities at the waste site address the following activities: future soil disturbance, routine and non-routine utility work, well placement and drilling, recreational activities, groundwater withdrawals, paving, training activities, construction, renovation work on structures; or other activities? Describe by type of site.

Yes. There are specific ER procedures for controlling all of these activities. These procedures are implemented as required by the program through notification that the specific activities are to be undertaken

5. Describe how the CFLUP serves as a tracking mechanism that identifies all land areas under restriction or control.

The information about all of the WAG 2 sites requiring institutional controls has been loaded into the database supporting the CFLUP. However, the CFLUP has not yet been modified to incorporate the information. When complete, the CFLUP will provide a picture of each site, surveyed coordinates of the sites, lists of the ICs required for the sites, and a contact name and phone number of the representative of the sites. The CFLUP is updated on an annual basis, unless changes to land usage or changes to ICs of the release sites occur. In these instances, the CFLUP will be updated within the year that the changes occurred.

6. Describe the process that is in place to promptly notify both EPA and the state prior to any anticipated change in land use designation, restriction, land users or activity for any institutional control required by a decision document. If yes, please describe.

The Operations and Maintenance Plan, Section 6, specifies the procedure by which the EPA and the state would be notified prior to any anticipated change in land use designation, restriction, land users, or activities for ICs specified for WAG 2, OU 2-13. ICs will not be deleted or terminated unless the EPA and the state have concurred in the deletion or termination, based on the results of the 5-year remedy reviews.

7. Has INEEL designated a point of contact for implementing, maintaining, and monitoring institutional controls? If yes, provide name, title and phone number?

Yes. Steve Wilksinson, WAG 2 Project Manager, (208) 526-4150. Currently, this information can be obtained by contacting the WCC at 526-1515.

8. Has DOE-ID obtained sufficient funding to institute and maintain institutional controls pursuant to Paragraph 28 of the Federal Facility Agreement and Consent Order? If no, describe what steps were taken to obtain sufficient funding.

Yes, the DOE-ID has obtained sufficient funding to institute and maintain the required ICs at WAG 2, OU 2-13.

9. Has INEEL deleted or terminated any institutional control? If so describe the circumstances to include how the state and EPA were involved in the decision.

During a conference call with the Agencies on September 19, 2000, it was agreed that the "No Action" sites in Table 4-1 of the OU 2-13 ROD do not require an institutional control sign and permission to remove these signs was granted. No ICs pertaining to the other WAG 2, OU 2-13 sites have been terminated or deleted.

10. Has INEEL transferred, sold or leased any property subject to institutional controls in OU 2-13? If yes, please describe to include dates of notification to state and EPA.

No property subject to ICs in WAG 2, OU 2-13 has been transferred, sold, or leased at the time of this inspection.

11. Has INEEL transferred, sold or leased any other property? If yes, please describe to include dates of notification to state and EPA.

No property associated with TRA has been transferred, sold, or leased at the time of this inspection.

12. Does INEEL have any plans in the next year to transfer, sell, or lease any properties?

DOE-ID does not have any plans to transfer, sell, or lease any TRA properties during fiscal year 2002.

DEFICIENCIES:

Provide a description of any deficiencies and the efforts or measures that have been or will be taken to correct problems.

The CFLUP does not presently provide the required functions to serve as a tracking mechanism for land areas under restriction or control.

At the time of this inspection, no DOE-ID directive exists that restricts drilling into contaminated zones. A DOE-ID directive will be developed prior to the next inspection.

IMPROVEMENTS:

Describe any additional institutional control requirements that may be necessary due to unique circumstances observed during the visual inspection?

No additional IC requirements were identified during the inspection.

| d Current | | Requi | Required Institutional Control (WS, CFLUP, | Observed Institutional Controls (WS, | ICs O&F | | |
|--------------------------------------|----------------|-----------------------|--|--------------------------------------|-------------|----------------------|---|
| Use b Land Use P, L, W) ^c | | P, L, W) ^c | | CFLUP, P, L, W) ^c | p(N/A) | Photo Numbers | Visual Inspection Comments |
| ZI, RC ZI WS, CFLUP, P, L | | WS, CFLUP, P, L | _ ' | WS, CFLUP, P, L | Υ | PD000608-80 and 81 | Restrict Occupational Access |
| ZI, U ZI WS, CFLUP, P, L | | WS, CFLUP, P, L | | WS, CFLUP, P, L | ۲ | PD000608-84 and 85 | Industrial Use |
| ZI, U ZI P, L | | P,L | | WS, CFLUP, P, L | Y | PD000608-78 and 79 | Industrial Use |
| ZI, RC ZI WS, P, L | WS, P, | WS, P, L | | WS, CFLUP, P, L | Y | PD000608-82 and 83 | Restrict Occupational Access |
| ZI, RC ZI WS, P, L | WS, P, | WS, P, L | | WS, CFLUP, P, L | Y | PD000608- 97 and 98 | Restrict Occupational Access |
| ZI, RC ZI WS, P, L | | WS, P, L | | WS, CFLUP, P, L | > | PD000608-96 | Restrict Occupational Access and Prohibit Residential (sign is inside of TRA-630) |
| ZI, RC ZI WS, P, L | | WS, P, L | | WS, CFLUP, P, L | ¥ | PD000608-94 and 95 | Restrict Occupational Access and Prohibit Residential |
| ZI ZI P.L | | P, L | _ | WS, CFLUP, P, L | Y | PD000608-90 and 91 | Industrial Use |
| ZI ZI P,L | | P,L | | WS, CFLUP, P, L | Υ | PD000608-92 and 93 | Industrial Use |
| ZI ZI P,L | | P,L | | WS, CFLUP, P, L | Y | PD000608-86 and 87 | Industrial Use |
| ZI ZI P, L | | P, L | - | WS, CFLUP, P, L | Y | PD000608-99 and 100 | Industrial Use Only < 10 ft |
| ZI, ZI P, L | | P, L | | WS, CFLUP, P, L | Y | PD000608-101 and 102 | Industrial Use |
| ZI ZI P, L | | P, L | | WS, CFLUP, P, L | Y | PD000608-88 and 89 | Industrial Use For Approximately 30 Years |
| W, CFLUP, P, L | W, CFLUP, P, L | W, CFLUP, P, L | | W, CFLUP, P, L | | N/A | Groundwater Monitoring is Performed Semiannually |

See OU 2-13 ROD or subsequent decision document for site description. Does not include "No Action" sites.

Describe land use, unrestricted (U), structures-industrial (SI), zoned industrial (ZI), grazing (G), radiologically controlled (RC), etc. Explain in comments.

WS = warning signs, CFLUP = INEEL Comprehensive Facility and Land Use Plan, NA = no action, P = property transfer restrictions, L = lease restrictions, W = well drilling restrictions

O&F = Is the institutional control required in ROD operational and functional (e.g., signs posted)?

Appendix B Radiological Monitoring Data

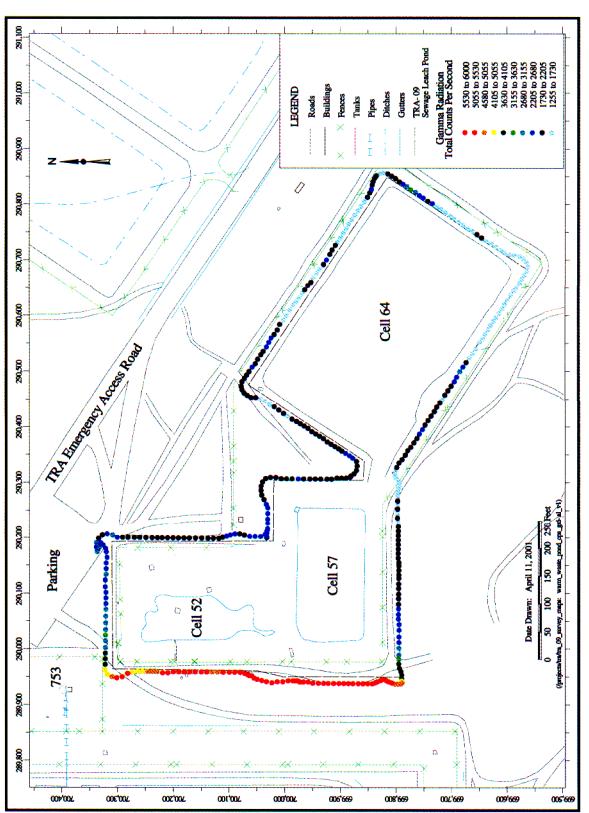


Figure B-1. Warm Waste Pond radiological survey results from 2000.

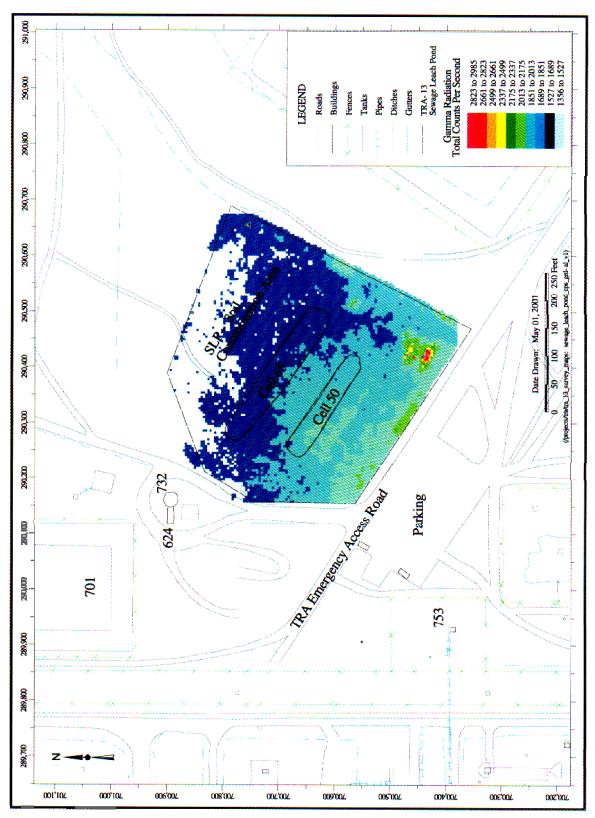


Figure B-2. Sewage Leach Pond and Sewage Leach Pond Soil Contaminated Area radiological survey results from 2000.

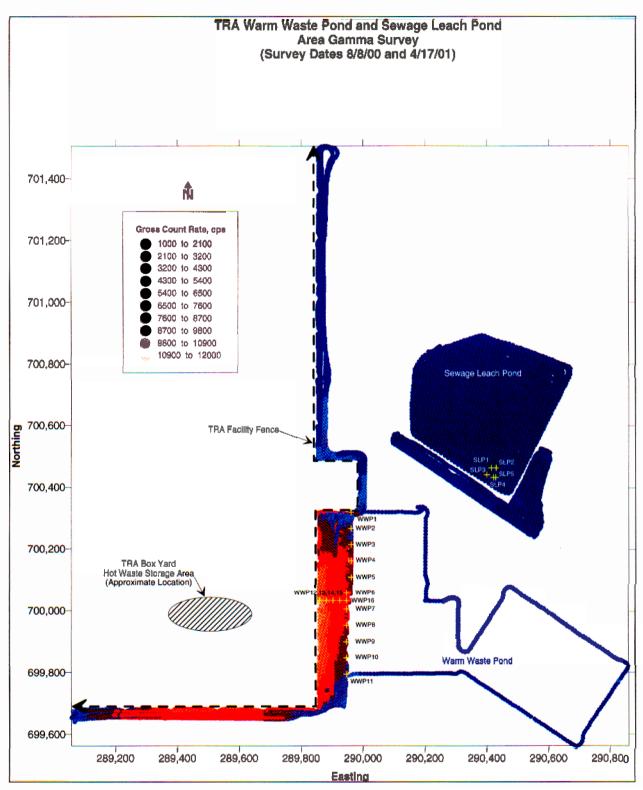


Figure B-3. 2001 annual radiological survey results with ISO-CART measurement points at the Warm Waste Pond and Sewage Leach Pond.

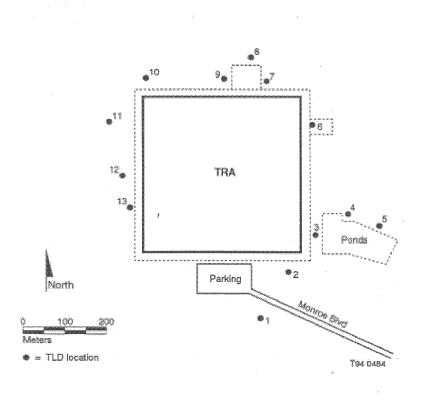


Figure B-4. Environmental Monitoring Program TLD locations near the TRA facility.